J. L. FAY.

COMBINATION WIRE SUPPORT FOR ELECTRIC DISTRIBUTION.

APPLICATION FILED AUG. 2, 1913.

1,184,336. Patented May 23, 1916.

Fig. 1.

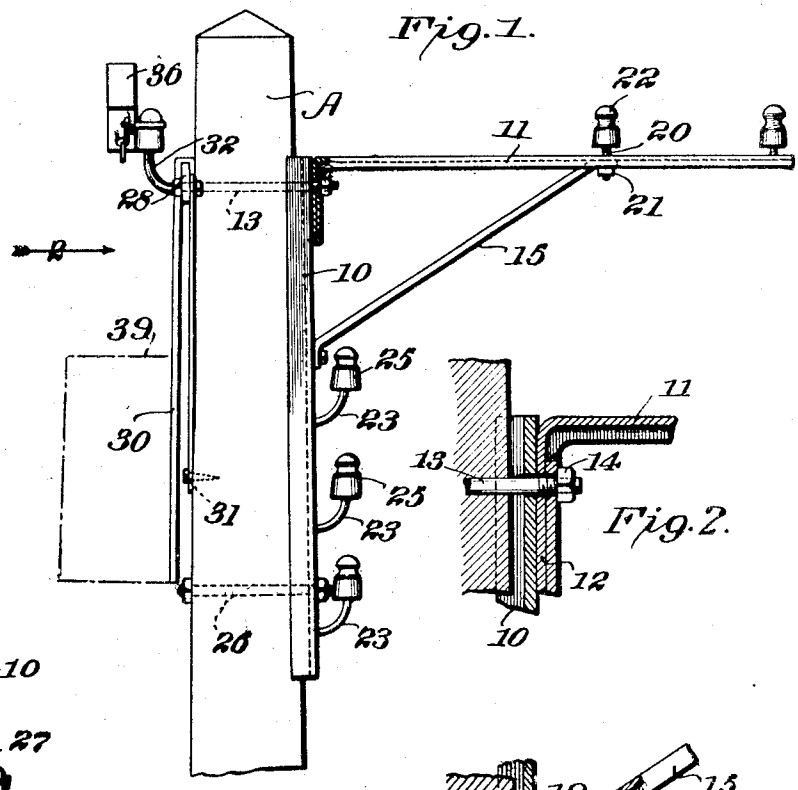
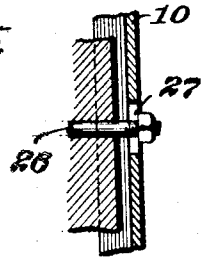


Fig. 2.

Fig. 5.



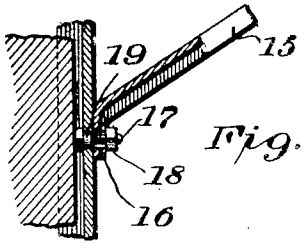


Fig. 3.

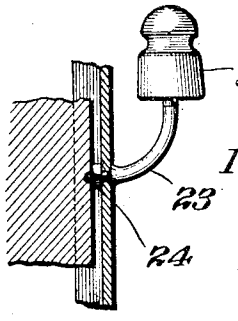


Fig. 4.

Witnesses;
J. Adolph Bishop.
M. Smith

Inventor;
John L. Fay,
By J. K. Cornwall.
Atty.

UNITED STATES PATENT OFFICE.

JOHN L. FAY, OF ST. LOUIS, MISSOURI, ASSIGNOR, BY MESNE ASSIGNMENTS, TO W. N. MATTHEWS AND BROTHER, INC., OF ST. LOUIS, MISSOURI, A CORPORATION OF NEW MEXICO.

COMBINATION WIRE-SUPPORT FOR ELECTRIC DISTRIBUTION.

1,184,336. Specification of Letters Patent. Patented May 23, 1916.

Application filed August 2, 1913. Serial No. 782,686.

To all whom it may concern:

Be it known that I, JOHN L. FAY, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Combination Wire-Supports for Electric Distribution, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevational view of a combination support of my improved construction, the same being applied for use on a pole. Fig. 2 is a detail sectional view of the connection between the main vertical leg and the horizontal supporting arm of my improved device. Fig. 3 is a detail sectional view of the connection between the lower end of a brace and the vertical leg of the device. Fig. 4 is a detail section of a portion of the vertical leg of the support and showing an insulator bracket thereon. Fig. 5 is a detail section taken vertically through the lower portion of the vertical leg of the support.

My invention relates to new and useful improvements in supports for electric wires, which supports are generally located on poles.

The principal objects of my invention are first; to provide a comparatively simple, inexpensive combination support, particularly designed for carrying the primary and secondary wires of an electric circuit; second, to provide a construction which will make it possible to standardize the various parts entering into the construction of the primary and secondary wire supports; third, to provide a combination support having the proper clearances between the points of attachment of the supported wires; fourth, to provide a combined support which can be easily and quickly placed in position on a pole, and which is comparatively light in weight and yet has ample strength and requisite rigidity.

To the above purposes my invention consists in certain novel features of construction and arrangement of parts, hereinafter more fully described and claimed.

In the construction of my improved support I utilize a base or main leg 10 which is preferably a section of channel-iron and which, when applied to the pole A, occupies a vertically disposed position with the flanges at the sides of said leg bearing against said pole. It is to be particularly noted that owing to the flanges having bearing at their inner edges against the pole, the base member 10 is securely maintained in proper vertical position and liability of the member shifting laterally from the vertical is obviated, while at the same time an inclosed space is provided between the web of said member and the pole to accommodate the nuts or heads of certain of the fastening members as will more fully hereinafter appear, it being noted that when the member 10 is drawn inward toward the pole through the action of bolts 13 and 26, the nuts located within the space between the member and pole will be securely clamped between the opposite faces of said parts thereby preventing the nuts becoming loosened and escaping.

The horizontally disposed arm 11 of the support is preferably formed of a section of angle-iron with the flanges downwardly presented, and one end of this arm is bent downward at right angles to the main body portion thereof as designated by 12, and bears directly against the upper portion of the leg 10. The flanges of this downwardly bent portion 12 are bent downward onto the web of said portion 12 thus maintaining the full strength of the metal at the bent end of the arm. One end of a bolt 13 which passes through the pole A passes through coinciding apertures formed in the web of the leg 10 and in the downwardly bent inner end of the arm 11, and the end of this bolt is threaded and receives a nut 14.

A brace 15 preferably formed of a section of channel-iron is arranged between the leg 10 and arm 11, and the inner lower end of this brace is bent downward as designated by 16 and is attached to the leg 10 by means of a bolt 17 and nut 18. The head of this bolt is positioned against the inner face of the web of the leg 10 and formed on said bolt is an oval or non-circular boss 19 which occupies a corresponding aperture in the web of the leg, thus holding said bolt

against rotation when the nut 18 is tightened in locking the lower end of the brace to the leg.

The upper end of the brace 15 is attached to the arm 11 by means of a vertically disposed bolt 20 which receives a nut 21 and the upper end of this bolt carries an ordinary glass insulator 22. Additional insulators may be mounted on the arm 11, said insulators serving as points of attachment for the primary wires of electric distribution circuits. The lower ends of curved bolts or brackets 23 pass through suitable apertures in the web of the leg 10 and located on said ends inside the web are nuts 24. The upper ends of these curved brackets or bolts carry ordinary glass insulators 25 which serve as points of attachment for the secondary wires of the circuits. The lower portion of the leg 10 is attached to the pole A by means of a bolt 26 which passes through said pole and receives nuts upon its threaded ends. The aperture 27 in the web of the leg 10 through which this bolt passes is elongated in order to compensate for any variance of distance between the apertures formed through the pole A and which receives the bolts 13 and 26.

A combination support of my improved construction is comparatively simple, comprises a minimum number of parts which are all formed of ordinary commercial shapes, and which can be cheaply manufactured and easily assembled or taken apart. By making the various parts of my improved support in regular sizes the supporting equipment can be standardized and the cost of installation and repair will be materially reduced.

It will be readily understood that minor changes in the size, form and construction of the various parts of my improved combined wire support can be made and substituted for those herein shown and described without departing from the spirit of my invention, the scope of which is set forth in the appended claims.

I claim:

1. The herein described combination wire support for electrical distribution comprising a channel member adapted to be vertically positioned upon a pole with the edges of its flanges bearing directly against said pole so as to maintain the web of said channel member in spaced relation to the pole, attaching bolts passing through the upper and lower portions of the web of said channel member and adapted to pass through the pole to which said member is applied, a horizontally disposed arm projecting outwardly from the upper portion of said channel member and secured thereto by the upper one of the bolts, a plurality of wire supporting insulators positioned on said horizontal arm, and a brace fixed to and arranged between said arm and the channel member.

2. The combination with a pole, of a wire support comprising a vertically disposed channel member arranged with the edges of its flanges bearing against the pole so as to maintain the web of said channel member in spaced relation to said pole, attaching bolts seated in the pole and passing through the upper and lower portions of the web of said supporting member, a horizontally disposed arm applied to the upper portion of said supporting member and secured by the upper one of the bolts, a plurality of wire supporting insulators mounted on the horizontal arm, and a brace between said arm and the vertically disposed supporting member.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 30th day of July, 1913.

JOHN L. FAY.

Witnesses:
M. P. SMITH,
M. A. HANDEL.